



UNITED STATES PATENT AND TRADEMARK OFFICE

m-5

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,881	11/21/2003	Paul Matthijs	920522-95146	2916
23644	7590	09/25/2006	EXAMINER	
BARNES & THORNBURG LLP P.O. BOX 2786 CHICAGO, IL 60690-2786			SHERMAN, STEPHEN G	
			ART UNIT	PAPER NUMBER
			2629	
DATE MAILED: 09/25/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/719,881	MATTHIJS ET AL.
	Examiner	Art Unit
	Stephen G. Sherman	2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 August 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-15 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 21 November 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

DETAILED ACTION

1. This office action is in response to the amendment filed the 29 August 2006.

Claims 1-15 are pending.

Response to Arguments

2. Applicant's arguments filed the 29 August 2006 have been fully considered but they are not persuasive.

In the applicant's remarks beginning on page 5, paragraph 6 the applicant begins the argument that Lee does not anticipate claim 1 as amended. The applicant states that there is no image display on the LCD device, which the applicant elaborates further in the 3rd paragraph on page 6 stating that the screen shown in Figure 2A to Figure 2G of the Lee application is a screen belonging to a tester and is not the screen having defective pixels. With respect to this argument the examiner agrees that Lee does not teach of modulating the operation of the display to indicate defective pixels. The applicant continues to state, on page 6, paragraph 4, that the last step, which is an alternative step to step b, is not anticipated by Lee because in Lee there is no indication of an adaptation of any pixels of an image in order to give a particular mark in a copy of that image. The examiner respectfully disagrees. The claim only requires of "adapting the image content of the defective pixel or the pixels in the neighborhood of the defective pixels so as to indicate, emphasize or warn for the presence of said defective

pixels in a copy of the displayed image," and as stated in the rejection the screen is a copy of the display image and the defective pixels are indicated on the screen, thus Lee anticipates claim 1 and similarly claims 9 and 15. Even the applicant states on page 7, lines 1-3 of the remarks that "Lee only discloses the appearance of the position of a defect in a readable photograph." In this statement the photograph is a "copy of the displayed image" and the appearance of the position of a defect is adapting the image content to indicate the presence of defective pixels. Therefore, even the applicant's statement shows that Lee anticipates independent claims 1, 9 and 15.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "modulating the operation of the display so as to indicate, emphasize or warn for the presence of said defective pixels on the actual display having defect pixels" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 5, 9, 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (US 2002/0000983).

Regarding claim 1, Lee et al. discloses a method for avoiding misinterpretation of an image displayed on a matrix display due to defective pixels in the matrix display, the method comprising:

obtaining information on the presence of the defective pixels in the display (Paragraphs [0034] and [0040] and Figure 2A explain that information is obtained about defective pixels from a photograph as shown in Figure 2A by the markings on the picture.), and

modulating the operation of the display so as to indicate, emphasise or warn for the presence of said defective pixels on the actual display of said image, or adapting the image content of the defective pixels or of pixels in the neighborhood of the defective pixels so as to indicate, emphasize or warn for the presence of said defective pixels in a copy of the displayed image (Figure 2A shows a window which is displayed on the display screen which indicates the presence of defective pixels as explained in paragraph [0040].).

Regarding claim 5, Lee et al. disclose a method according to claim 1, wherein indicating, emphasizing or warning for the presence of at least one defective pixel comprises marking the at least one defective pixel on the display (Figure 2A and paragraph [0040] explain that the defective pixel is indicated on the display by placing a marking on the photograph.).

Regarding claim 9, this claim is rejected under the same rationale as claim 1.

Regarding claim 12, this claim is rejected under the same rationale as claim 5.

Regarding claim 15, this claim is rejected under the same rationale as claim 1.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 6-7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 2002/0000983).

Regarding claim 6, Lee et al. disclose a method according to claim 1.

Lee et al. fail to teach that the method further comprises showing the displayed image so that defective pixels are not located in a region of interest.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to show the displayed image so that the defective pixels

would not be located in a region of interest in order to allow for the proper viewing of the image without any defects in the image being viewable.

Regarding claim 7, Lee et al. disclose a method according to claim 1.

Lee et al. fail to teach that that the method further comprises shifting the displayed image so that a defective pixel is located in a flat image area.

However, it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to shift the displayed image so that the defective pixels would be located in a flat image area in order to allow for the proper viewing of the image without any defects in the image being viewable.

Regarding claim 13, this claim is rejected under the same rationale as claim 6.

Regarding claim 14, this claim is rejected under the same rationale as claim 7.

4. Claims 2-4, 8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 2002/0000983) in view of Takanashi (US 6,806,870).

Regarding claim 2, Lee et al. disclose a method according to claim 1.

Lee et al. fail to teach wherein the copy is a hard copy or an electronic copy.

Takanashi discloses wherein a copy of a displayed image is a hard copy or an electronic copy (Column 9, lines 1-14 explain that a hard copy of the displayed image is made on a recording medium such as paper.).

Therefore it would have been obvious to “one of ordinary skill” in the art at the time the invention was made that the copy of the displayed image taught by Lee et al. is a hard copy or electronic copy as taught by Takanashi in order to provide a display apparatus which can accurately display an image based on image data set in advance.

Regarding claim 3, Lee et al. disclose a method according to claim 1.

Lee et al. fail to teach wherein the information is obtained from data previously stored in a memory device.

Takanashi discloses wherein the information is obtained from data previously stored in a memory device (Column 9, line 64 to column 10, line 4 explain that the data is stored in a hard disk of the computer system.).

Therefore it would have been obvious to “one of ordinary skill” in the art at the time the invention was made that the information taught by Lee et al. is obtained from data previously stored in a memory device as taught by Takanashi in order to provide a display apparatus which can accurately display an image based on image data set in advance.

Regarding claim 4, Lee et al. and Takanashi disclose a method according to claim 3.

Takanashi also discloses a method comprising, while displaying the image on the matrix display supplying information on defective pixels to a user, based on the stored data (Column 9, lines 1-14 and column 9, lines 64 to column 10, line 4 explain that the

image data displayed on the screen is photographed and printed on paper and then stored and then displayed on the screen, meaning that the image is displayed and the user then receives information on the defective pixels, which are subsequently corrected.).

Therefore it would have been obvious to “one of ordinary skill” in the art at the time the invention was made that the information taught by Lee et al. is obtained from data previously stored in a memory device as taught by Takanashi in order to provide a display apparatus which can accurately display an image based on image data set in advance.

Regarding claim 8, Lee et al. disclose a method according to claim 1.

Lee et al. fail to teach wherein the information on the presence of defective pixels is obtained by means of an image capturing device.

Takanashi discloses wherein the information on the presence of defective pixels is obtained by means of an image capturing device (Column 9, lines 1-14 explain that the image display is photographed by a digital camera.).

Therefore it would have been obvious to “one of ordinary skill” in the art at the time the invention was made that the information on the presence of defective pixels taught by Lee et al. is obtained by means of an image capturing device as taught by Takanashi in order to allow for the proper measurement of the defects which occur on the display.

Regarding claim 10, this claim is rejected under the same rationale as claim 3.

Regarding claim 11, this claim is rejected under the same rationale as claim 4.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS

6 September 2006

AMR A. AWAD
SUPERVISORY PATENT EXAMINER
